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(54) **MULTIPLEX AMPLIFICATION OF SHORT TANDEM REPEAT LOCI**(75) Inventors: **James W. Schumm**, Madison, WI (US); **Cynthia J. Sprecher**, Madison, WI (US)(73) Assignee: **Promega Corporation**, Madison, WI (US)

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C12Q 1/68 (2006.01)(52) **U.S. Cl.** **435/6**; 435/91.1; 435/91.2; 536/23.1; 536/24.3(58) **Field of Classification Search** 435/6, 435/91.1, 91.2; 536/23.1, 24.3
See application file for complete search history.(56) **References Cited****U.S. PATENT DOCUMENTS**

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Methods and materials are disclosed for use in simultaneously amplifying at least thirteen loci of genomic DNA in a single multiplex reaction, as are methods and materials for use in the analysis of the products of such reactions. Included in the present invention are materials and methods for the simultaneous amplification of at least thirteen short tandem repeat loci, including specific materials and methods for the analysis of thirteen such loci specifically selected by the United States Federal Bureau of Investigation as core loci for use in the Combined DNA Index System (CODIS) database.